

Supplement to

CHEMOSPHERE

Lists of Contents and Author Index
Volume 36, 1998



PERGAMON

EDITORS

CHEMISTRY AND BIOCHEMISTRY

Mr D. W. Kuehl

U.S. Environmental Protection Agency, Duluth, MN 55804, U.S.A.

Fax: (1) 218 720 5539; E-mail: kuehl.douglas@epamail.epa.gov

Professor Dr M. Oehme

Organic Analytical Chemistry, University of Basle, IWB/GSA, Neuhausstr 31, CH-4057 Basel, Switzerland

Fax: (41) 61 639 2300

ECOTOXICOLOGY

Professor Dr J. P. Giesy

Department of Zoology, Michigan State University, MI 48824-1115, U.S.A.

Fax: (1) 517 432 2789; E-mail: Jgiesy@AOL.com

Professor W. Klein

Fraunhofer-Institut für Umweltchemie und Ökotoxikologie, Grafenschaft/Hochsauerland, D-57392 Schmallenberg, Germany

Fax: (49) 2972 30 2319; E-mail: profklein@iuct.fhg.de

Dr M. Yasuno

The University of Shiga Prefecture, School of Environmental Science, 2500 Hassaka, Hikone 522, Japan

Fax: (81) 749 28 8463; E-mail: yasuno@ses.usp.ac.jp

TOXICOLOGY, PHARMACOKINETICS AND EPIDEMIOLOGY

Professor S. Safe

Veterinary Physiology and Pharmacology, Texas A & M University, College Station, TX 77843, U.S.A.

Fax: (1) 409 845 6544; E-mail: ssafe@vetmed.tamu.edu

ATMOSPHERIC CHEMISTRY AND GLOBAL CHANGE

Dr M. A. K. Khalil

Department of Physics, Portland State University, PO Box 751, Portland, OR 97207-0751, U.S.A.

Fax: (1) 503 725 8550; E-mail: aslam@atmos.phy.pdx.edu

EDITORIAL BOARD

CHEMISTRY AND BIOCHEMISTRY

J. Albaigés, CID-CSIC, Barcelona, Spain

K. Ballschmiter, Universität Ulm, Ulm, Germany

R. E. Clement, Ministry of the Environment, Etobicoke, Ontario, Canada

D. W. Connell, Griffith University, Brisbane, Australia

H. Fiedler, University of Bayreuth, Bayreuth, Germany

W. Giger, Swiss Federal Institute of Technology, Dubendorf, Switzerland

H. P. Hagenmaier, University of Tübingen, Tübingen, Germany

O. J. Hao, University of Maryland at College Park, MD, U.S.A.

R. A. Hites, Indiana University, Bloomington, IN, U.S.A.

R. C. Lao, Environment Canada, Ottawa, Canada

D. Lenoir, GSF Institut für Ökologische Chemie, Neuherberg, Germany

D. Mackay, University of Toronto, Toronto, Canada

A. A. Moghissi, PO Box 7166, Alexandria, VA, U.S.A.

J. M. Novak, USDA Coast Plans SML, Water and Plant Research Center, Florence, SC, U.S.A.

H. Parlar, Technische Universität München, Freising-Weihenstephan, Germany

C. Rappe, University of Umeå, Umeå, Sweden

A. Sabljic, Institute Rudjer Bošković, Zagreb, Croatia

P. R. Wallnöfer, Bayerische Landesanstalt für Ernährung, Munich, Germany

V. Zitko, Biological Station, St Andrews, Canada

ECOTOXICOLOGY

G. T. Ankley, United States Environmental Protection Agency, Duluth, MN, U.S.A.

S. M. Bartell, Senes Oak Ridge Inc., Oak Ridge, TN, U.S.A.

D. Calamari, Università degli Studi di Milano, Milan, Italy

R. T. Digiulio, Duke University, Durham, NC, U.S.A.

A. Fliedner, Fraunhofer-Institut für Umweltchemie und Ökotoxikologie, Schmallenberg, Germany

P.-D. Hansen, Technische Universität Berlin, Berlin, Germany

P. F. Landrum, Great Lakes Environmental Research Laboratory, Ann Arbor, MI, U.S.A.

R. Nagel, Institut für Hydrobiologie, Dresden, Germany

D. Tillitt, United States Department of the Interior, Columbia, MO, U.S.A.

TOXICOLOGY, PHARMACOKINETICS AND EPIDEMIOLOGY

Y. Masuda, Daiichi College of Pharmaceutical Sciences, Fukuoka, Japan

W. Mücke, Technical University of Munich, Munich, Germany

H. Nakazawa, Hoshi University, Tokyo, Japan

Ch. Schlatter, University of Zurich, Schwerzenbach, Switzerland

M. van den Berg, University of Utrecht, Research Institute of Technology, Utrecht, The Netherlands

ATMOSPHERIC CHEMISTRY AND GLOBAL CHANGE

V. P. Aneja, North Carolina State University, Raleigh, NC, U.S.A.

P. Brimblecombe, University of East Anglia, Norwich, U.K.

C. I. Davidson, Carnegie Mellon University, Pittsburgh, PA, U.S.A.

R. Harriss, University of New Hampshire, Durham, NH, U.S.A.

L. Husain, University of Albany, Albany, NY, U.S.A.

D. Kammen, The Woodrow Wilson School of Public & International Affairs, Princeton University, Princeton, NJ, U.S.A.

V. W. J. H. Kirchhoff, Instituto Nacional de Pesquisas Espaciais (INPE), São José dos Campos, S.P., Brazil

H. Papen, Fraunhofer Institute for Atmospheric Environmental Research, Garmisch-Partenkirchen, Germany

D. C. Parashar, National Physical Laboratory, New Delhi, India

S. A. Penkett, University of East Anglia, Norwich, U.K.

R. A. Rasmussen, Oregon Graduate Institute, PO Box 91000 Portland, OR, U.S.A.

W. Seiler, Fraunhofer Institute for Atmospheric Environmental Research, Garmisch-Partenkirchen, Germany

LIST OF CONTENTS

Number 1

	v	Contributors to this issue
H. Wagenaar, K. Langeland, R. Hardman, Y. Sergeant, K. Brenner, P. Sandra, C. Rappe, A. Fernandes and T. Tiernan	1	Analysis of PCDDs and PCDFs in virgin suspension PVC resin
A. R. Isensee, A. M. Sadeghi and R. S. Mylavarapu	13	Impact of burn-down herbicides on atrazine washoff from vegetation
F. Schuler, P. Schmid and Ch. Schlatter	21	Photodegradation of polychlorinated dibenzo- <i>p</i> - dioxins and dibenzofurans in cuticular waxes of laurel cherry (<i>Prunus laurocerasus</i>)
L. Nitschke and W. Schüssler	35	Surface water pollution by herbicides from effluents of waste water treatment plants
M. Leivuori	43	Heavy metal contamination in surface sediments in the Gulf of Finland and comparison with the Gulf of Bothnia
E. Mangas, M. T. Vaquero, L. Comellas and F. Broto-Puig	61	Analysis and fate of aliphatic hydrocarbons, linear alkylbenzenes, polychlorinated biphenyls and polycyclic aromatic hydrocarbons in sewage sludge- amended soils
Shu-Li Zhao, Fu-Sheng Wei, Han-Fa Zou and Xiao-Bai Xu	73	Determination of arylamine compounds in waste water using solid-phase extraction and reversed- phase high performance liquid chromatography
B. Raber, I. Kögel-Knabner, C. Stein and D. Klem	79	Partitioning of polycyclic aromatic hydrocarbons to dissolved organic matter from different soils
J. Solbé, U. Mark, B. Buyle, W. Guhl, T. Hutchinson, P. Kloepper-Sams, R. Länge, R. Munk, N. Scholz, W. Bontinck and H. Niessen	99	Analysis of the ECETOC aquatic toxicity (EAT) data- base. I — General introduction
R. Länge, T. H. Hutchinson, N. Scholz and J. Solbé	115	Analysis of the ECETOC aquatic toxicity (EAT) data- base. II — Comparison of acute to chronic ratios for various aquatic organisms and chemical substances
T. H. Hutchinson, J. Solbé and P. J. Kloepper-Sams	129	Analysis of the ECETOC aquatic toxicity (EAT) data- base. III — Comparative toxicology of chemical sub- stances to different life stages of aquatic organisms
T. H. Hutchinson, N. Scholz and W. Guhl	143	Analysis of the ECETOC aquatic toxicity (EAT) data- base. IV — Comparative toxicity of chemical sub- stances to freshwater versus saltwater organisms
U. Mark and J. Solbé	155	Analysis of the ECETOC aquatic toxicity (EAT) database. V — The relevance of <i>Daphnia magna</i> as a representative test species
M. Xu, H. S. Kim, S. Guan, A. G. Marshall and R. C. Dougherty	167	FT-ICR analysis of urban air particulates: problems with SRM 1649
Y. Zuo and Y. Deng	181	The near-UV absorption constants for nitrite ion in aqueous solution
K. R. Cooper and C.-M. Chen	189	Toxic interaction of 2,3,7,8-TCDD, 2,3,7,8-TCDF, 1,2,3,7,8-PeCDD, and 1,2,3,4,7,8-HeCDD: on the Japanese medaka (<i>Oryzias latipes</i>)

M. C. Henderson, C. M. Neumann and D. R. Buhler	203	Analysis of denatonium benzoate in Oregon consumer products by HPLC
Ph. Egeler, J. Römbke, M. Meller, Th. Knacker, C. Franke, G. Studinger and R. Nagel	211	Corrigendum. Bioaccumulation of lindane and hexachloro-benzene by tubificid sludgeworms (<i>Oligochaeta</i>) under standardized laboratory conditions

Number 2

	v	Contributors to this issue
S. I. Semb, E. M. Brevik and S. Pedersen-Bjergaard	213	Capillary gas chromatography combined with atomic emission detection for the analysis of DDT and metabolites
C. E. Luthe	225	Progress in reducing dioxins and AOX: a Canadian perspective
C. Luthe, I. Karidio and V. Uloth	231	Dioxins formation in salt-laden power boilers: a mass balance
S. D. Kohl and J. A. Rice	251	The binding of contaminants to humin: a mass balance
W. Scharenberg and E. Ebeling	263	Organochlorine pesticides in eggs of two waterbird species (<i>Fulica atra</i> , <i>Podiceps cristatus</i>) from the same habitat: reference site Lake Belau, Germany
H. Greim, D. Bury, H.-J. Klimisch, M. Oeben-Negele and K. Ziegler-Skylakakis	271	Toxicity of aliphatic amines: structure-activity relationship
J. Hyötyläinen, J. Knuutinen, P. Malkavaara and J. Siltala	297	Pyrolysis-GC-MS and CuO-oxidation-HPLC in the characterization of HMMs from sediments and surface waters downstream of a pulp mill
C. Rappe, R. Andersson, M. Bonner, K. Cooper, H. Fiedler and F. Howell	315	PCDDs and PCDFs in municipal sewage sludge and effluent from POTW in the State of Mississippi, USA
Sun Hao, Wang Xiaorong, Wang Qin, Wang Liansheng, Chen Yijun, Dai Iemei, Li Zhong and Cao Mi	329	The species of spiked rare earth elements in sediment and potential bioavailability to algae (<i>Chlorella vulgaris</i> <i>beijerinckii</i>)
P. Kanungo, B. Ramakrishnan and V. Rajaramamohan Rao	339	Nitrogenase activity of <i>Azospirillum</i> Sp. isolated from rice as influenced by a combination of NH_4^+ -N and an insecticide, carbofuran
A. Finizio, T. F. Bidleman and S. Y. Szeto	345	Emission of chiral pesticides from an agricultural soil in the Fraser Valley, British Columbia
B. Halling-Sørensen, S. Nors Nielsen, P. F. Lanzky, F. Ingerslev, H. C. Holten Lützhøft and S. E. Jørgensen	357	Occurrence, fate and effects of pharmaceutical substances in the environment—a review
L. V. Buendia, H. U. Neue, R. Wassman, R. S. Lantin, A. M. Javellana, J. Arah, Z. Wang, L. Wanfang, A. K. Makarim, T. M. Corton and N. Charoensilp	395	An efficient sampling strategy for estimating methane emission from rice field
Y. Kim and K. R. Cooper	409	Interactions of 2,3,7,8-tetrachlorodibenzo-P-dioxin (TCDD) and 3,3',4,4'-pentachlorobiphenyl (PCB 126) for producing lethal and sublethal effects in the Japanese medaka embryos and larvae

Number 3

v

Contributors to this issue

- C. A. Gonzalez, M. Kogevinas, A. Huici, 419**
E. Gadea, M. Ladona, A. Bosch and
M. J. Bleda
 Blood levels of polychlorinated dibenzodioxins, polychlorinated dibenzofurans and polychlorinated biphenyls in the general population of a Spanish Mediterranean city
- R. Panades, A. Ibarz, M. Riba and 427**
S. Esplugas
 Photodecomposition of the sex pheromones of *Cydia pomonella* and *Lobesia botrana* in aqueous solutions
- T. K. Mandal, P. Baldrian, J. Gabriel, 435**
F. Nerud and F. Zadražil
 Effect of mercury on the growth of wood-rotting basidiomycetes *Pleurotus ostreatus*, *Pycnoporus cinnabarinus* and *Serpula lacrymans*
- S. Pudenz, R. Brüggeman, 441**
D. Komoša and K. Kreimes
 An algebraic/graphical tool to compare ecosystems with respect to their pollution by PB/CD—III. Comparative regional analysis by applying a similarity index
- M. T. Saçan and I. A. Balcioğlu 451**
 Estimation of liquid vapor pressures for low-volatility environmental chemicals
- M. van der Zee, J. H. Stoutjesdijk, 461**
H. Feil and J. Feijen
 Relevance of aquatic biodegradation tests for predicting degradation of polymeric materials during biological solid waste treatment
- N. B. Omar, M. T. Gonzalez-Muñoz 475**
and J. M. A. Peñalver
 Struvite crystallization on *Myxococcus* cells
- J.-S. Kim, K. Itoh and M. Murabayashi 483**
 Photocatalytic degradation of trichloroethylene in the gas phase over TiO₂ SOL-GEL films: analysis of products
- P. N. Moza, K. Hustert, E. Feicht 497**
and A. Kettrup
 Photolysis of imidacloprid in aqueous solution
- M. Leivuori and H. Vallius 503**
 A case study of seasonal variation in the chemical composition of accumulating suspended sediments in the central Gulf of Finland
- S. Shawky and H. Emons 523**
 Distribution pattern of organotin compounds at different trophic levels of aquatic ecosystems
- Bea-Ven Chang, Chen-Wei Chiang 537**
and Shaw-Ying Yuan
 Dechlorination of pentachlorophenol in anaerobic sewage sludge
- M. Kowalska and D. L. Cocker 547**
 Interactions of chloroanilines with natural and ion exchanged montmorillonites
- F. Gilbert, G. Stora, G. Desrosiers, 553**
J.-P. Gagne, B. Deflandre and
J.-C. Bertrand
 Changes in aliphatic hydrocarbon tracer composition during the digestive process of the marine worm *Nereis virens*. Preliminary results
- K. Næs and E. Oug 561**
 The distribution and environmental relationships of polycyclic aromatic hydrocarbons (PAHs) in sediments from Norwegian smelter-affected fjords
- J. Hyötyläinen, J. Knuutinen and 577**
P. Malkavaara
 Transport of high molecular mass lignin material in the receiving water system of a mechanical pulp mill

R. Mathew, S. Kacew and S. U. Khan	589	Bioavailability in rats of bound pesticide residues from tolerant or susceptible varieties of soybean and canola treated with metribuzin or atrazine
S. T. Carril González-Barros, M. E. Alvarez Piñeiro, J. Simal Lozano and M. A. Lage Yusty	597	Aliphatic hydrocarbons in wolf tissue samples from Galicia (N. W. Spain)
R. J. Ozretich and D. W. Schults	603	A comparison of interstitial water isolation methods demonstrates centrifugation with aspiration yields reduced losses of organic constituents
Juei-Yun Chang and Jia-Ming Lin	617	Aliphatic aldehydes and allethrin in mosquito-coil smoke

Numbers 4/5

SPECIAL ISSUE—STRESS FACTORS AND AIR POLLUTION

	ix	Contributors to this issue
	625	Introduction
M. E. Quist	627	Acid episodes decisive for plant performance
G. D. Hogan	633	Effect of simulated acid rain on physiology, growth and foliar nutrient concentrations of sugar maple
J. Suomela, S. Neuvonen, S. Ossipova, V. Ossipov and K. Pihlaja	639	A long-term study of the effects of simulated acid rain on birch leaf phenolics
A. Esch and K. Mengel	645	Combined effects of acid mist and frost on the water status of young spruce trees (<i>Picea abies</i>)
G. Della Torre, F. Ferranti, M. Lupattelli, N. Pocceschi, A. Figoli, C. Nali and G. Lorenzini	651	Effects of ozone on morpho-anatomy and physiology of <i>Hedera helix</i>
L. Guidi, C. Nali, G. Lorenzini and G. F. Soldatini	657	Photosynthetic response to ozone of two poplar clones showing different sensitivity
S. Anttonen, M. Kittilä and L. Kärenlampi	663	Impacts of ozone on Aleppo pine needles: visible symptoms, starch concentrations and stomatal responses
H. Ro-Poulsen, T. N. Mikkelsen, M. F. Hovmand, P. Hummelsehøj and N. O. Jensen	669	Ozone deposition in relation to canopy physiology in a mixed conifer forest in Denmark
L. Kärenlampi, S. Metsärinne and E. Pääkkönen	675	Stomatal conductance of birch leaves—plenty of variation in the variable which determines the ozone dose
E. Pääkkönen, J. Vahala, T. Holopainen and L. Kärenlampi	679	Physiological and ultrastructural responses of birch clones exposed to ozone and drought stress
R. Inclán, R. Alonso, M. Pujadas, J. Terés and B. S. Gimeno	685	Ozone and drought stress: interactive effects on gas exchange in Aleppo pine (<i>Pinus halepensis</i> Mill.)
S. Sutinen, G. Wallin, P. E. Karlsson, L. Skärby and G. Selldén	691	Cell ultrastructure of needles from saplings of Norway spruce, <i>Picea abies</i> (L) Karst., exposed to ozone and low phosphorus supply in open-top chambers

A. Bytnerowicz, K. Percy, G. Riechers, P. Padgett and M. Krywult	697	Nitric acid vapor effects on forest trees—deposition and cuticular changes
A. Panicucci, C. Nali and G. Lorenzini	703	Differential photosynthetic response of two Mediterranean species (<i>Arbutus unedo</i> and <i>Viburnum tinus</i>) to sulphur dioxide
A. Wonisch, M. Müller, M. Tausz, G. Soja and D. Grill	709	Stress-physiological investigations and chromosomal analyses on cloned Norway spruce trees exposed to various levels of ozone in open-top chambers
P. Bruschi, S. Schiff, A. Bennici and B. Mori	715	An example of <i>in vitro</i> test to study the effects of surfactants in plant materials
E. D. Balaganskaya and O. V. Kudrjavitseva	721	Change of the morphological structure of leaves of <i>Vaccinium vitis-idaea</i> caused by heavy metal pollution
E. Kukkola and S. Huttunen	727	Structural observations on needles exposed to elevated levels of copper and nickel
I. Arduini, C. Kettner, D. L. Godbold, A. Onnis and A. Stefani	733	pH influence on root growth and nutrient uptake of <i>Pinus pinaster</i> seedlings
I. Arduini, D. L. Godbold, A. Onnis and A. Stefani	739	Heavy metals influence mineral nutrition of tree seedlings
T. M. Nieminen	745	The effect of soil copper and nickel on survival and growth of Scots pine saplings
B. Kieliszewska-Rokicka, M. Rudawska, T. Leski and E. U. Kurczyńska	751	Effect of low pH and aluminium on growth of <i>Pinus sylvestris</i> L. seedlings mycorrhizal with <i>Suillus luteus</i> (L.ex Fr.) S. F. Gray
D. L. Godbold, G. Jentschke, S. Winter and P. Marschner	757	Ectomycorrhizas and amelioration of metal stress in forest trees
P. De Angelis and G. E. Scarascia-Mugnozza	763	Long-term CO ₂ -enrichment in a Mediterranean natural forest: an application of large open top chambers
F. Miglietta, I. Bettarini, A. Raschi, C. Körner and F. P. Vaccari	771	Isotope discrimination and photosynthesis of vegetation growing in the Bossoleto CO ₂ spring
J. B. Bucher, D. P. Tarjan, R. T. W. Siegwolf, M. Saurer, H. Blum and G. R. Hendrey	777	Growth of a deciduous tree seedling community in response to elevated CO ₂ and nutrient supply
C. Kurz, U. Schmieden, P. Strobel and A. Wild	783	The combined effect of CO ₂ ozone, and drought on the radical scavenging system of young oak trees (<i>Quercus petraea</i>)—a phytotron study
H. E. Schmadel-Hageböiling, C. Engel, V. Schmitt and A. Wild	789	The combined effects of CO ₂ , ozone and drought on rubisco and nitrogen metabolism of young oak trees (<i>Quercus petraea</i>)—a phytotron study
J. Utriainen and T. Holopainen	795	Ultrastructural and growth responses of young Scots pine seedlings (<i>Pinus sylvestris</i>) to increasing carbon dioxide and ozone concentrations

F. Manes, M. Vitale, E. Donato and E. Paoletti	801	O ₃ and O ₃ +CO ₂ effects on a Mediterranean evergreen broadleaf tree, holm oak (<i>Quercus ilex</i> L.)
D. F. Karnosky, G. K. Podila, Z. Gagnon, P. Pechter, A. Akkapeddi, Y. Sheng, D. E. Riemenschneider, M. D. Coleman, R. E. Dickson and J. G. Isebrands	807	Genetic control of responses to interacting tropospheric ozone and CO ₂ in <i>Populus tremuloides</i>
W. Prus-Glowacki, J. Oleksyn and P. B. Reich	813	Relation between genetic structure and susceptibility to air pollution of European <i>Pinus sylvestris</i> populations from a IUFRO-1982 provenance experiment
B. Degen and F. Scholz	819	Ecological genetics in forest ecosystems under stress as analysed by the simulation model ECOGENE
A. Ipsen, B. Kasten, F. Scholz and B. Ziegenhagen	825	Studying allelic diversity and stress response of PEPC (phosphoenolpyruvate carboxylase) in Norway spruce (<i>Picea abies</i>)
S. Huttunen, H. Kinnunen and K. Laakso	829	Impact of increased UV-B on plant ecosystems
E. Paoletti	835	UV-B and acid rain effects on beech (<i>Fagus sylvatica</i> L.) and holm oak (<i>Quercus ilex</i> L.) leaves
F. Antonelli, F. Bussotti, D. Grifoni, P. Grossoni, B. Mori, C. Tani and G. Zipoli	841	Oak (<i>Quercus robur</i> L.) seedlings responses to a realistic increase in UV-B radiation under open space conditions
H. Kinnunen, S. Manninen, R. Peura, K. Laakso and S. Huttunen	847	Effects of the UV-B treatment on the distribution of wax tubes of Scots pine needles
D. C. Gordon, K. E. Percy and R. T. Riding	853	Effect of enhanced UV-B radiation on adaxial leaf surface micromorphology and epicuticular wax biosynthesis of sugar maple
D. L. Godbold	859	Stress concepts and forest trees
M. Baur, U. Lauchert and A. Wild	865	Biochemical indicators for novel forest decline in spruce
G. Rabotti and A. Ballarin-Denti	871	Biochemical responses to abiotic stress in beech (<i>Fagus sylvatica</i> L.) leaves
S. Wohlfahrt, V. Schmitt and A. Wild	877	Investigation on phosphoenol pyruvate carboxylase and proline in damaged and undamaged needles of <i>Picea abies</i> and <i>Abies alba</i>
W. Wilksch, V. Schmitt and A. Wild	883	Ethylene-biosynthesis in conifers: investigations on the emission of ethylene and the content of ACC and MACC in Norway Spruce (<i>Picea abies</i>) and silver fir (<i>Abies alba</i>)
P. Puccinelli, N. Anselmi and M. Bragaloni	889	Peroxidases: usable markers of air pollution in trees from urban environments
J. N. Cape and K. E. Percy	895	Use of needle epicuticular wax chemical composition in the early diagnosis of Norway Spruce (<i>Picea abies</i> (L.) Karst.) decline in Europe

T. Staszewski, W. Łukasik, S. Godzik, J. Szduj and A. K. Uziębło	901	Climatic and air pollution gradient studies on coniferous trees health status, needles wettability and chemical characteristics
E. Paoletti, P. Raddi and S. La Scala	907	Relationships between transpiration, stomatal damage and leaf wettability in declining beech trees
P. Grossoni, F. Bussotti, B. Mori, M. Magalotti and S. Mansuino	913	Morpho-anatomical effects of pollutants on <i>Pinus pinea</i> L. needles
P. Grossoni, F. Bussotti, C. Tani, E. Gravano, S. Santarelli and A. Bottacci	919	Morpho-anatomical alterations in leaves of <i>Fagus sylvatica</i> L. and <i>Quercus ilex</i> L. in different environmental stress condition
Cs. Béres, A. Fenyvesi, A. Raschi and H.-W. Ridder	925	Field experiment on water transport of oak trees measured by computer tomograph and magnetic resonance imaging
A. Fenyvesi, Cs. Béres, A. Raschi, R. Tognietti, H.-W. Ridder, T. Molnár, J. Röfler, T. Lakatos and I. Csiha	931	Sap-flow velocities and distribution of wet-wood in trunks of healthy and unhealthy <i>Quercus robur</i> , <i>Quercus petraea</i> and <i>Quercus cerris</i> oak trees in Hungary
B. Vinceti, E. Paoletti and U. Wolf	937	Analysis of soil, roots and mycorrhizae in a Norway spruce declining forest
J. M. Santamaría and A. Martín	943	Influence of air pollution on the nutritional status of Navarra's forests, Spain
B. Maňkovská	949	The chemical composition of spruce and beech foliage as an environmental indicator in Slovakia
A. Simon and A. Wild	955	Mineral nutrients in leaves and bast of pedunculate oak (<i>Quercus robur</i> L.) at different states of defoliation
A. Kaus and A. Wild	961	Nutrient disturbance through manganese accumulation in Douglas fir
S. Augustin, P. Schall and U. Schmieden	965	Modelling aspects of forest decline in Germany—I. Theoretical aspects and cause-effect relationships
P. Schall, S. Augustin and U. Schmieden	971	Modelling aspects of forest decline in Germany—II. Application and validation of an integrated soil-plant-model
P. Rautio, S. Huttunen and J. Lamppu	979	Effects of sulphur and heavy metal deposition on foliar chemistry of Scots pines in Finnish Lapland and on the Kola Peninsula
E. P. Farrell, R. Van Den Beuken, G. M. Boyle, T. Cummins and J. Aherne	985	Interception of seasalt by coniferous and broadleaved woodland in a maritime environment in western Ireland
A. Klumpp, M. Domingos, R. M. de Moraes and G. Klumpp	989	Effects of complex air pollution on tree species of the Atlantic Rain Forest near Cubatão, Brazil
J. M. Skelly, J. L. Innes, K. R. Snyder, J. E. Savage, C. Hug, W. Landolt and P. Bleuler	995	Investigations of ozone induced injury in forests of southern Switzerland: field surveys and open-top chamber experiments

P. Miller, A. Bytnerowicz, M. Fenn, M. Poth, P. Temple, S. Schilling, D. Jones, D. Johnson, J. Chow and J. Watson	1001	Multidisciplinary study of ozone, acidic deposition and climate effects on a mixed conifer forest in California, USA
G. Raben, H. Andreae and F. Symosseck	1007	Consequences of reduced immissions on the ecochemical conditions of forest ecosystems in Saxony (Germany)
T. Staszewski, A. Uziębło and J. Szdzuj	1013	Characteristic of pine needles from trees of different age growing in the protective zone of "Konin" aluminum smelter
M. Tausz, J. Peters, M. S. Jimenez, D. Morales and D. Grill	1019	Element contents and stress-physiological characterization of <i>Pinus canariensis</i> needles in Mediterranean type field stands in Tenerife
J. L. Innes	1025	Role of diagnostic studies in forest monitoring programmes
M. Ferretti	1031	Potential and limitation of visual indices of tree condition
M. Ferretti, L. Baratozzi, E. Cenni, A. Cozzi and P. Savini	1037	Crown transparency of beech (<i>Fagus sylvatica</i> L.) in the northern Apennines (Italy)—status, changes and relationships with site characteristics and other indices of tree condition
P. Ambrosi, F. Bertolini, E. George, S. Minerbi and C. Salvadori	1043	Integrated monitoring in alpine forest ecosystems in Trentino and South Tyrol, Italy
A. Ballarin-Denti, S. M. Cocucci and F. Di Girolamo	1049	Environmental pollution and forest stress: a multidisciplinary approach study on alpine forest ecosystems
P. Bonavita, C. Chemini, P. Ambrosi, S. Minerbi, C. Salvadori and C. Furlanello	1055	Biodiversity and stress level in four forests of the Italian Alps
F. Vertui and F. Tagliaferro	1061	Scots pine (<i>Pinus sylvestris</i> L.) die-back by unknown causes in the Aosta Valley, Italy
V. Šrámek	1067	SO ₂ air pollution and forest health status in north-western Czech Republic
J. Poikolainen, M. Kuusinen, K. Mikkola and M. Lindgren	1073	Mapping of the epiphytic lichens on conifers in Finland in the years 1985–86 and 1995
S. Loppi, E. Cenni, F. Bussotti and M. Ferretti	1079	Biomonitoring of geothermal air pollution by epiphytic lichens and forest trees
R. Dell'Era, E. Brambilla and A. Ballarin-Denti	1083	Ozone and air particulate measurements in mountain forest sites
Ma. J. Sanz and M. M. Millán	1089	The dynamics of aged airmasses and ozone in the western Mediterranean: relevance to forest ecosystems
R. Balestrini, L. Galli, A. Tagliaferri and G. Tartari	1095	Study on throughfall deposition in two north Italian forest sites (Valtellina, Lombardy)

A.-J. Lindroos, J. Derome and K. Niska	1101	The effect of emissions from Cu-Ni smelters at Nikel, NW Russia, on the quality of bulk deposition, stand throughfall and percolation water in four Scots pine stands in Northern Norway and Finland
E. García-Rodeja, M. J. Fernández-Sanjurjo and V. Fernández-Vega	1107	Input-output ion fluxes in the River Sor catchment (Galicia, NW Spain)
J. Kulhavý and E. Klimo	1113	Soil and nutrition status of forest stands under various site conditions of the Moravian-Silesian Beskids
I. Stjernquist, B. Nihlgård, A. N. Filiptchouk and V. V. Strakhov	1119	Soil and forest vitality as affected by air pollutants on the Kola Peninsula
G. I. Agapkina, A. I. Shcheglov, F. A. Tikhomirov and L. N. Merculova	1125	Dynamics of Chernobyl-fallout radionuclides in soil solutions of forest ecosystems
J. Derome and A.-J. Lindroos	1131	Copper and nickel mobility in podzolic forest soils subjected to heavy metal and sulphur deposition in western Finland
A. Merino, F. Macías and E. García-Rodeja	1137	Aluminium dynamics in experimentally acidified soils from a humid-temperate region of south Europe
K. Derome, J. Derome and A.-J. Lindroos	1143	Techniques for preserving and determining aluminium fractions in soil solution from podzolic forest soils
G. Deutschmann	1149	New aspects of buffering processes in stony soils
R. Mäkipää, T. Karjalainen, A. Pussinen and M. Kukkola	1155	Effects of nitrogen fertilization on carbon accumulation in boreal forests: model computations compared with the results of long-term fertilization experiments
N. P. Lamersdorf, K. Blanck, M. Bredemeir and Y.-J. Xu	1161	Drought experiments within the Solling roof project

Number 6

	v	Contributors to this issue
S. L. Huntley, H. Carlson-Lynch, G. W. Johnson, D. J. Paustenbach and B. L. Finley	1167	Identification of historical PCDD/F sources in Newark Bay Estuary subsurface sediments using polytopic vector analysis and radioisotope dating techniques
Lain-Chuen Juang, Dyi-Hwa Tseng and Jiunn-Fwu Lee	1187	Photolytic mechanism of monochlorobenzene in an aqueous UV/H ₂ O ₂ system
Juei Shen Wang, Hong Nong Chou, Jin-Jia Fan and Chien-Min Chen	1201	Uptake and transfer of high PCB concentrations from phytoplankton to aquatic biota
I. Harrison, R. U. Leader, J. J. W. Higgo and G. M. Williams	1211	A study of the degradation of phenoxyacid herbicides at different sites in a limestone aquifer
C. E. Wujcik, D. Zehavi and J. N. Seiber	1233	Trifluoroacetic acid levels in 1994-1996 fog, rain, snow and surface waters from California and Nevada
B. Hope, S. Scatolini and E. Titus	1247	Bioconcentration of chlorinated biphenyls in biota from the North Pacific Ocean

P. J. Dierickx	1263	Increased cytotoxic sensitivity of cultured FHM fish cells by simultaneous treatment with sodium dodecyl sulfate and buthionine sulfoximine
G. Thiebaut, A. Vanderpoorten, F. Guerold, J.-P. Boudot and S. Muller	1275	Bryological patterns and streamwater acidification in the Vosges Mountains (N.E. France): an analysis tool for the survey of acidification processes
K. Rönnpagel, E. Janßen and W. Ahlf	1291	Asking for the indicator function of bioassays evaluating soil contamination: are bioassay results reasonable surrogates of effects on soil microflora?
A. Fargašová and E. Beinrohr	1305	Metal-metal interaction in accumulation of V^{5+} , Ni^{2+} , Mo^{6+} , Mn^{2+} and Cu^{2+} in under- and above-ground parts of <i>Sinapis alba</i>
W. de Wolf and T. Feijtel	1319	Terrestrial risk assessment for linear alkyl benzene sulfonate (LAS) in sludge-amended soils
L. Bláha, J. Damborský and M. Němec	1345	QSAR for acute toxicity of saturated and unsaturated halogenated aliphatic compounds
D. Brown, C. P. Croudace, N. J. Williams, J. M. Shearing and P. A. Johnson	1367	The effect of phthalate ester plasticisers tested as surfactant stabilised dispersions on the reproduction of the <i>Daphnia magna</i>
M. A. Kähkönen and P. K. G. Manninen	1381	The uptake of nickel and chromium from water by <i>Elodea canadensis</i> at different nickel and chromium exposure levels
M. T. Ahmed, G. A. Mostafa, S. A. Al Rasbi and A. A. Askar	1391	Capillary gas chromatography determination of aliphatic hydrocarbons in fish and water from Oman
M. M. Watts and D. Pascoe	1405	Selection of an appropriate life-cycle stage of <i>Chironomus riparius</i> meigen for use in chronic sediment toxicity testing
A.-L. Rantalainen, J. Paasivirta and S. Herve	1415	Uptake of chlorohydrocarbons from soil by lipid-containing semipermeable membrane devices (SPMDs)
P. Andersson and S. Marklund	1429	Emissions of organic compounds from biofuel combustion and influence of different control parameters using a laboratory scale incinerator
M. C. Terrón, F. J. M. Verhagen, M. C. R. Franssen and J. A. Field	1445	Chemical bromination of phenol red by hydrogen peroxide is possible in the absence of haloperoxidases
J. M. Brannon, C. B. Price and C. Hayes	1453	Abiotic transformation of TNT in montmorillonite and soil suspensions under reducing conditions
R. J. Wright, E. E. Codling and S. F. Wright	1463	Root growth and trace element uptake in acid soils treated with coal combustion by-products

Number 7

	vii	Contributors to this issue
Wang Guilian and Bai Naibin	1475	Structure-activity relationships for rat and mouse LD50 of miscellaneous alcohols

L. Muszkat, L. Feigelson, L. Bir and K. A. Muszkat	1485	Reaction patterns in photooxidative degradation of two herbicides
K. Tuppurainen, I. Halonen, P. Ruokojärvi, J. Tarhanen and J. Ruuskanen	1493	Formation of PCDDs and PCDFs in municipal waste incineration and its inhibition mechanisms: a review
R. P. H. Schmitz, A. Eisenträger, T. Lindvogt, M. Möller and W. Dott	1513	Increase of the toxic potential of synthetic ester lubricant oils by usage: application of aquatic bioassays and chemical analysis
E. Pramauro, A. Bianco Prevot, M. Vincenti and R. Gamberini	1523	Photocatalytic degradation of naphthalene in aqueous TiO ₂ dispersions: effect of nonionic surfactants
M. A. Saleh, A. Kamel, A. El-Demerdash and J. Jones	1543	Penetration of household insecticides through different types of textile fabrics
Jyh-Cherng Chen, Ming-Yen Wey, Bo-Chin Chiang and Shu-Mu Hsieh	1553	The simulation of hexavalent chromium formation under various incineration conditions
L. B. Reutergardh, P. Parkpian and C. Chaiyaraksa	1565	Supercritical fluid extraction of planar and mono-ortho PCB in selected tropical soils
S. El Fantroussi, R. Giot, H. Naveau and S. N. Agathos	1575	Acclimation of a methanogenic consortium to a mixture of hydroxylated aromatic compounds
C. A. Staples, R. J. Boatman and M. L. Cano	1585	Ethylene glycol ethers: an environmental risk assessment
T. Kalajzic, M. Bianchi, H. Muntau, and A. Kettrup	1615	Polychlorinated biphenyls (PCBs) and organochlorine pesticides (OCPs) in the sediments of an Italian drinking water reserve
J. Klasmeier and M. S. McLachlan	1627	PCDD/Fs in textiles—I. A screening method for detection of octachlorodibenzo- <i>p</i> -dioxin and octachlorodibenzofuran
C.-S. Hong, J. Xiao, B. Bush and S. D. Shaw	1637	Environmental occurrence and potential toxicity of planar, mono-, and di- <i>ortho</i> polychlorinated biphenyls in the biota
C.-S. Hong, Y. Wang and B. Bush	1653	Kinetics and products of the TiO ₂ photocatalytic degradation of 2-chlorobiphenyl in water
J. H. Weber, R. Evans, S. H. Jones and M. E. Hines	1669	Conversion of mercury (II) into mercury(0), monomethylmercury cation, and dimethylmercury in saltmarsh sediment slurries

Number 8

	vii	Contributors to this issue
G. Öberg, C. Johansen and C. Grøn	1689	Organic halogens in spruce forest throughfall
M. Lodovici, V. Akpan, C. Casalini, C. Zappa and P. Dolara	1703	Polycyclic aromatic hydrocarbons in <i>Laurus nobilis</i> leaves as a measure of air pollution in urban and rural sites of Tuscany

W. de Wolf and P. H. Lieder	1713	A novel method to determine uptake and elimination kinetics of volatile chemicals in fish
A. Saupe, H. J. Garvens and L. Heinze	1725	Alkaline hydrolysis of TNT and TNT in soil followed by thermal treatment of the hydrolysates
U. Raschke, G. Werner, H. Wilde and U. Stottmeister	1745	Photolysis of metribuzin in oxygenated aqueous solutions
E. Funari, L. Barbieri, P. Bottoni, G. Del Carlo, S. Forti, G. Giuliano, A. Marinelli, C. Santini and A. Zavatti	1759	Comparison of the leaching properties of alachlor, metolachlor, triazines and some of their metabolites in an experimental field
J.-M. Delpuech, E. Gareau, O. Terrier and P. Fouillet	1775	Sublethal effects of the insecticide chlorpyrifos on the sex pheromonal communication of <i>Trichogramma brassicae</i>
J. T. van Elteren, U. D. Woroniecka and K. J. Kroon	1787	Accumulation and distribution of selenium and cesium in the cultivated mushroom <i>Agaricus bisporus</i> —a radiotracer-aided study
R. H. A. Brown, J. N. Cape and J. G. Farmer	1799	Partitioning of chlorinated solvents between pine needles and air
P. Kruus, L. Beutel, R. Aranda, J. Penchuk and R. Otson	1811	Formation of complex organochlorine species in water due to cavitation
E. A. Rochette and W. C. Koskinen	1825	Atrazine sorption in field-moist soils: supercritical carbon dioxide density effects
A. Kussak, B. Andersson, K. Andersson and C.-A. Nilsson	1841	Determination of aflatoxicol in human urine by immunoaffinity column clean-up and liquid chromatography
Z. M. Li, P. J. Shea and S. D. Comfort	1849	Nitrotoluene destruction by UV-catalyzed Fenton oxidation
W. Mersie, C. Seybold, D. Tierney and C. McNamee	1867	Effect of temperature, disturbance and incubation time on release and degradation of atrazine in water columns over two types of sediments
D. C. Bouchard	1883	Organic cosolvent effects on the sorption and transport of neutral organic chemicals
K. L. Yang and J. G. Lo	1893	Volatile hydrocarbons (C ₆ –C ₁₀) measurements at remote sites of Taiwan during the PEM-West A experiment (1991)
T. Hanazato	1903	Growth analysis of <i>Daphnia</i> early juvenile stages as an alternative method to test the chronic effect of chemicals

Number 9

v

Contributors to this issue

S. Biagianti-Risbourg, G. Vernet and H. Boulekbache	1911	Ultrastructural response of the liver of rainbow trout, <i>Oncorhynchus mykiss</i> , sac-fry exposed to acetone
G. Gramss, Th. Günther, K.-D. Voigt and B. Kirsche	1923	Comparative activities of oxidoreductase enzymes in tissue extracts of crop plants and in culture fluids of fungal mycelia

R. Pongratz and K. G. Heumann	1935	Production of methylated mercury and lead by polar macroalgae—a significant natural source for atmospheric heavy metals in clean room compartments
N. Corin, P. Backlund and T. Wiklund	1947	Bacterial growth in humic waters exposed to UV-radiation and simulated sunlight
M.-B. Chang and Y.-T. Chung	1959	Dioxin contents in fly ashes of MSW incineration in Taiwan
C. F. Mason	1969	Decline in PCB levels in otters (<i>Lutra lutra</i>)
K. Bester, S. Biselli, R. Gatermann, H. Hühnerfuss, W. Lange and N. Theobald	1973	Results of non target screening of lipophilic organic pollutants in the German bight—III. Identification and quantification of 2,5-dichloroaniline
B. Sangchakr, T. Hisanaga and K. Tanaka	1985	Photocatalytic degradation of 1,1-difluoroethane (HFC-152a)
I. A. Balcioglu and N. Getoff	1993	Advanced oxidation of 4-chlorobenzaldehyde in water by UV-light, ozonation and combination of both methods
E. Fattore, L. Müller, E. Davoli, D. Castelli and E. Benfenati	2007	Industrial pollutants in ground waters from northern Milan
D. W. Connell, R. S. S. Wu, B. J. Richardson, K. Leung, P. S. K. Lam and P. A. Connell	2019	Fate and risk evaluation of persistent organic con-taminants and related compounds in Victoria Harbour, Hong Kong
H.-H. Mi, W.-J. Lee, S.-J. Chen, T.-C. Lin, T.-L. Wu and J.-C. Hu	2031	Effect of the gasoline additives on PAH emission
T. S. Müller, Z. Sun, G. Kumar, K. Itoh and M. Murabayashi	2043	The combination of photocatalysis and ozonolysis as a new approach for cleaning 2,4-dichlorophenoxy-aceticacid polluted water
V. R. Hebert, J. D. Geddes, J. Mendosa and G. C. Miller	2057	Gas-phase photolysis of phorate, a phosphorothioate insecticide
K. Fytianos, E. Voudrias and Th. Mouratidou	2067	The sorption-desorption behavior of linear alkylbenzene sulfonate in marine sediments
K. S. Lin, H. P. Wang and M. C. Li	2075	Oxidation of 2,4-dichlorophenol in supercritical water
R. Götz, O. H. Bauer, P. Friesel and K. Roch	2085	Organic trace compounds in the water of the River Elbe near Hamburg—I
R. Götz, O. H. Bauer, P. Friesel and K. Roch	2103	Organic trace compounds in the water of the River Elbe near Hamburg—II
P. Peralta-Zamora, S. Gomes de Moraes, R. Pelegrini, M. Freire Jr, J. Reyes, H. Mansilla and N. Durán	2119	Evaluation of ZnO, TiO ₂ and supported ZnO on the photo-assisted remediation of black liquor, cellulose and textile mill effluents
H. M. Chan, J. Zhu and F. Yeboah	2135	Determination of toxaphene in biological samples using high resolution GC coupled with ion trap MS/MS

Number 10

	v	Contributors to this issue
C. A. Staples, P. B. Dorn, G. M. Klecka, S. T. O'Block and L. R. Harris	2149	A review of the environmental fate, effects, and exposures of bisphenol A
S. J. H. Crum, G. H. Aalderink and T. C. M. Brock	2175	Fate of the herbicide linuron in outdoor experimental ditches
Zifan Xiao, J. Sommar, O. Lindqvist, Hong Tan and Jinlin He	2191	Atmospheric mercury deposition on Fanjing Mountain Nature Reserve, Guizhou, China
S. Ray, M. Bailey, G. Paterson, T. Metcalfe and C. Metcalfe	2201	Comparative levels of organochlorine compounds in flounders from the northeast coast of Newfoundland and an offshore site
H. H. Richnow, A. Eschenbach, B. Mahro, R. Seifert, P. Wehrung, P. Albrecht and W. Michaelis	2211	The use of ^{13}C -labelled polycyclic aromatic hydrocarbons for the analysis of their transformation in soil
H. M. G. van der Werf and C. Zimmer	2225	An indicator of pesticide environmental impact based on a fuzzy expert system
P. B. Sørensen, B. B. Mogensen, S. Gyldenkerne and A. G. Rasmussen	2251	Pesticide leaching assessment method for ranking both single substances and scenarios of multiple substance use
S. Takenaka	2277	Formation of 3-amino-2,6,8-trimethyl-10-phenyl-deca-4E, 6E-dienoic acid from microcystin LR by the treatment with various proteases, and its detection in mouse liver
P. Warwick, A. Hall, V. Pashley, J. Van der Lee and A. Maes	2283	Zinc and cadmium mobility in sand: effects of pH, speciation, cation exchange capacity (CEC), humic acid and metal ions
D. C. McAvoy, C. P. L. Grady Jr, J. Blok, T. C. J. Feijtel, T. W. Federle and R. J. Larson	2291	A simplified modeling approach using microbial growth kinetics for predicting exposure concentrations of organic chemicals in treated wastewater effluents
T. Yoshitomi, C. Nakayasu, S. Hasegawa, A. Iida and N. Okamoto	2305	Site-specific lead distribution in scales of lead-administered carp (<i>Cyprinus carpio</i>) by non-destructive SR-XRF analysis
M. C. Judd, T. R. Stuthridge and R. W. Price	2311	Pulp mill sourced organic compounds from New Zealand sediments—3. Mechanical pulp mills and remote sites
K. Hundt, M. Wagner, D. Becher, E. Hammer and F. Schauer	2321	Effect of selected environmental factors on degradation and mineralization of biaryl compounds by the bacterium <i>Ralstonia pickettii</i> in soil and compost
M. Kamiya and K. Kameyama	2337	Photochemical effects of humic substances on the degradation of organophosphorus pesticides
Shiu-Mei Liu, Chin-Hung Wu and Hui-Jung Huang	2345	Toxicity and anaerobic biodegradability of pyridine and its derivatives under sulfidogenic conditions

E. Eljarrat, J. Caixach and J. Rivera	2359	Microwave vs Soxhlet for the extraction of PCDDs and PCDFs from sewage sludge samples
Todd Hsu, Hua-Mei Huang and Chin-Hwa Hu	2367	Differential effects of heavy metals on the binding of <i>Xenopus</i> upstream binding factor (xUBF) to DNA
E. M. da Silva, A. M. V. M. Soares and A. J. M. Moreno	2375	The use of the mitochondrial transmembrane electric potential as an effective biosensor in ecotoxicological research
Jia-Lin Wang, Chih-Jong Chang and Yun-Huin Lin	2391	Concentration distributions of anthropogenic halo-carbons over a metropolitan area
H. K. Latimer, R. M. Kamens and G. Chandra	2401	The atmospheric partitioning of decamethylcyclopentasil-oxane(D5) and 1-hydroxynonamethylcyclopentasiloxane (D4TOH) on different types of atmospheric particles
M. Leivuori and H. Vallius	2415	Erratum: A case study of seasonal variation in the chemical composition of accumulating suspended sediments in the central Gulf of Finland

Number 11

	v	Contributors to this issue
K. Kümmerer, T. Erbe, S. Gartiser and L. Brinker	2437	AOX-emissions from hospitals into municipal waste water
G. O. Thomas, A. J. Sweetman, C. A. Parker, H. Kreibich and K. C. Jones	2447	Development and validation of methods for the trace determination of PCBs in biological matrices
S. T. C. Cheung, A. K. M. Fung and M. H. W. Lam	2461	Visible photosensitization of TiO ₂ —photodegradation of CCl ₄ in aqueous medium
S. Sinkkonen, N. Kämäräinen, J. Paasivirta, M. Lahtiperä and R. Lammi	2475	Alkylated dibenzothiophenes in pine needles from pulp and paper mill environment
Moo Been Chang and Chung Han Lee	2483	Dioxin levels in the emissions from municipal waste incinerators in Taiwan
Y. Tsujimoto, T. Noda, H. Moriwaki and M. Tanaka	2491	High performance liquid chromatographic determination of mercapturic acids in urine of rats administered with <i>m</i> - or <i>p</i> -xylene
I. L. Gee and C. J. Sollars	2497	Ambient air levels of volatile organic compounds in Latin American and Asian cities
S. Scott, D. Mackay and E. Webster	2507	Estimation of spatially variable atmospheric concentrations deduced from regional mass balance models
H.-P. Bipp, P. Wunsch, K. Fischer, D. Bieniek and A. Kettrup	2523	Heavy metal leaching of fly ash from waste incineration with gluconic acid and a molasses hydrolysate
R. Gatermann, H. Hühnerfuss, G. Rimkus, A. Attar and A. Kettrup	2535	Occurrence of musk xylene and musk ketone metabolites in the aquatic environment
R. M Burgess and S. A. Ryba	2549	A comparison of colloid-contaminant C ₁₈ -based isolation techniques using PCB contaminated humic substances and interstitial water

Number 12

	v	Contributors to this issue
S. Bobinger and J. T. Andersson	2569	Degradation of the petroleum components monomethylbenzothiophenes on exposure to light
M. Schuhmacher, J. L. Domingo, J. M. Llobet, L. Müller, W. Sünderhauf and J. Jager	2581	Baseline levels of PCDD/Fs in vegetation samples collected in the vicinity of a new hazardous waste incinerator in Catalonia, Spain
A. Vidal	2593	Developments in solar photocatalysis for water purification
N. L. Law and M. L. Diamond	2607	The role of organic films and the effect on hydrophobic organic compounds in urban areas: an hypothesis
H. Leppänen, S. Marttinen and A. Oikari	2621	The use of fish bile metabolite analyses as exposure bio-markers to pulp and paper mill effluents
R. Weber, H. Hagenmaier and D. Schrenk	2635	Elimination kinetics and toxicity of 2,3,7,8-tetrachloroanthren, a thio analogue of 2,3,7,8-TCDD
L. Weltje	2643	Mixture toxicity and tissue interactions of Cd, Cu, Pb and Zn in earthworms (<i>Oligochaeta</i>) in laboratory and field soils: A critical evaluation of data
A. Samecka-Cymerman and A. J. Kempers	2661	Comparison between natural background concentrations of heavy metals in bryophytes from the Sudety Mountains and Swiss Alps
Gang Yu, Wanpeng Zhu, Zhihua Yang and Zhonghe Li	2673	Semiconductor photocatalytic oxidation of H-acid aqueous solution
G. Palmer, R. McFadzean, K. Killham A. Sinclair and G. I. Paton	2683	Use of <i>lux</i> -based biosensors for rapid diagnosis of pollutants in arable soils
J. F. Brekken and P. L. Brezonik	2699	Indirect photolysis of acetochlor: rate constant of a nitrate-mediated hydroxyl radical reaction

Number 13

	v	Contributors to this issue
C. Rappe, S. Bergek, H. Fiedler and K. R. Cooper	2705	PCDD and PCDF contamination in catfish feed from Arkansas, U.S.A.
Bea-Ven Chang, Chung-Jen Su and Shaw-Ying Yuan	2721	Microbial hexachlorobenzene dechlorination under three reducing conditions
J. Peng and A. Wan	2731	Effect of ionic strength on Henry's constants of volatile organic compounds
K. Fytianos, E. Voudrias and A. Papamichali	2741	Behavior and fate of linear alkylbenzene sulfonate in different soils
R. Suter-Eichenberger, H. Altorfer, W. Lichtensteiger and M. Schlumpf	2747	Bioaccumulation of musk xylene (MX) in developing and adult rats of both sexes

Kuo-Hua Wang, Huan-Hung Tsai and Yung-Hsu Hsieh	2763	A study of photocatalytic degradation of trichloroethylene in vapor phase on TiO ₂ photocatalyst
A. Wehrmeier, D. Lenoir, K.-W. Schramm, R. Zimmermann, K. Hahn, B. Henkelmann and A. Kettrup	2775	Patterns of isomers of chlorinated dibenzo- <i>p</i> -dioxins as tool for elucidation of thermal formation mechanisms
R. Franzén, K. Tanabe and M. Morita	2803	Isolation of a MX-guanosine adduct formed at physiological conditions
D. Zakarya, E. M. Larfaoui, A. Boulaamail, M. Tollabi and T. Lakhlifi	2809	QSARs for a series of inhibitory anilides
H. Karl, I. Lehmann and K. Oetjen	2819	Levels of chlordane compounds in fish muscle, -meal, -oil and -feed
Jingwen Chen, W. J. G. M. Peijnenburg and Liansheng Wang	2833	Using PM3 Hamiltonian, factor analysis and regression analysis in developing quantitative structure-property relationships for photohydrolysis quantum yields of substituted aromatic halides

Number 14

v

Contributors to this issue

D. Martens, K. Balta-Brouma, R. Brotsack, B. Michalke, P. Schramel, C. Klimm, B. Henkelmann, K. Oxynos, K.-W. Schramm, E. Diamadopoulos and A. Kettrup	2855	Chemical impact of uncontrolled solid waste combustion to the vicinity of the Kouroupitos Ravine, Crete, Greece
T. S. Thompson and B. D. Miller	2867	Use of solid phase extraction disks for the GC-MS analysis of acidic and neutral herbicides in drinking water
Å. Ingemarsson, U. Nilsson, M. Nilsson, J. R. Pedersen and J. O. Olsson	2879	Slow pyrolysis of spruce and pine samples studied with GC/MS and GC/FTIR/FID
R. G. Fischer and K. Ballschmiter	2891	Determination of vapor pressure, water solubility, gas-water partition coefficient P_{GW} , Henry's law constant, and octanol-water partition coefficient P_{OW} of 26 alkyl dinitrates
B. M. Gawlik, E. A. Feicht, W. Karcher, A. Kettrup and H. Muntau	2903	Application of the European reference soil set (EUROSOILS) to a HPLC-screening method for the estimation of soil adsorption coefficients of organic compounds
S. E. Huuskonen, M. E. Hahn and P. Lindström-Seppä	2921	A fish hepatoma cell line (PLHC-1) as a tool to study cytotoxicity and CYP1A induction properties of cellulose and wood chip extracts
S. Masaphy, B. Krinfeld and D. Levanon	2933	Induction of linoleic acid-supported benzo(a)pyrene hydroxylase activity by manganese in the white rot fungus <i>Pleurotus pulmonarius</i>

M. A. Fernández, L. M. Hernández	2941	Analysis of polychlorinated terphenyls in marine samples
Ma. J. González, E. Eljarrat, J. Caixach and J. Rivera		
M. Salizzato, B. Pavoni,	2949	Sediment toxicity measured using <i>Vibrio fischeri</i> as related to the concentrations of organic (PCBs, PAHs) and inorganic (metals, sulphur) pollutants
A. Volpi Ghirardini and P. F. Ghetti		
Y. Inel and A. N. Ökte	2969	TiO ₂ sensitized photomineralization kinetics of phthalic anhydride
K. Rehmann, H. P. Noll,	2977	Pyrene degradation by <i>Mycobacterium</i> sp. strain KR2
C. E. W. Steinberg and A. A. Kettrup		
P. Khare, N. Kumar, G. S. Satsangi,	2993	Formate and acetate in particulate matter and dust fall at Dayalbagh, Agra (India)
K. Maharaj Kumari and S. S. Srivastava		
T. M. Slayton, P. A. Valberg and A. D. Wait	3003	Estimating dermal transfer from PCB-contaminated porous surfaces
Jae-Ho Yang	3015	Alterations of signal transduction pathways involved in 2,3,7,8-tetrachlorodibenzo- <i>p</i> -dioxin-induced malignant transformation of human cells in culture

Number 15

	v	Contributors to this issue
A. Q. Zhang, S. K. Han, J. Ma,	3033	Aerobic microbial degradation of aromatic sulfur-containing compounds and effect of chemical structures
X. C. Tao and L. S. Wang		
M. Kļaviņš, A. Briede, E. Parele,	3043	Metal accumulation in sediments and benthic invertebrates in lakes of Latvia
V. Rodinov and I. Kļaviņa		
K. Singh, A. Singh and D. K. Singh	3055	Synergism of MGK-264 and piperonyl butoxide on the toxicity of plant derive molluscicides
B. R. Sheedy, V. R. Mattson,	3061	Bioconcentration of polycyclic aromatic hydrocarbons by the freshwater oligochaete <i>Lumbriculus variegatus</i>
J. S. Cox, P. A. Kosian, G. L. Phipps and G. T. Ankley		
R. Schulz, M. Hauschild, M. Ebeling,	3071	A qualitative field method for monitoring pesticides in the edge-of-field runoff
J. Nanko-Drees, J. Wogram and M. Liess		
W. Groszko and R. M. Moore	3083	A semipermeable membrane equilibrators for halomethanes in seawater
N. A. Darwish, K. A. Halhouli and Y. Y. Al-Jahmani	3093	Quaternary adsorption equilibria from aqueous systems onto decolourizing activated carbon
Deng Nansheng, Wu Feng, Luo Fan and Xiao Mei	3101	Ferric citrate-induced photodegradation of dyes in aqueous solutions
A. Hilmi, J. H. T. Luong and A.-L. Nguyen	3113	Applicability of micellar electrokinetic chromatography to kinetic studies of photocatalytic oxidation of dibenzo- <i>p</i> -dioxin

M. D. Loewen, G. A. Stern, J. B. Westmore, D. C. G. Muir and H. Parlar	3119	Characterization of three major toxaphene congeners in arctic ringed seal by electron ionization and electron capture negative ion mass spectrometry
A. Hilmi, J. H. T. Luong and A.-L. Nguyen	3137	Capillary electrophoresis applied to kinetic studies of photocatalytic oxidation of substituted anilines
J. B. Butcher, E. A. Garvey and V. J. Bierman Jr	3149	Equilibrium partitioning of PCB congeners in the water column: field measurements from the Hudson River
J. A. Steevens, S. S. Vansal, K. W. Kallies, S. S. Knight, C. M. Cooper and W. H. Benson	3167	Toxicological evaluation of constructed wetland habitat sediments utilizing <i>Hyalella azteca</i> 10-day sediment toxicity test and bacterial bioluminescence
D. C. Gossiaux, P. F. Landrum and S. W. Fisher	3181	The assimilation of contaminants from suspended sediment and algae by the zebra mussel, <i>Dreissena polymorpha</i>
J. D. Gaynor, D. C. MacTavish and A. B. Labaj	3199	Atrazine and metolachlor residues in Brookston CL following conventional and conservation tillage culture
H. Hoshi, N. Minamoto, H. Iwata, K. Shiraki, R. Tatsukawa, S. Tanabe, S. Fujita, K. Hirai and T. Kinjo	3211	Organochlorine pesticides and polychlorinated biphenyl congeners in wild terrestrial mammals and birds from Chubu region, Japan: interspecies comparison of the residue levels and compositions
C. A. Gonzalez, M. Kogevinas, A. Huici, E. Gadea, M. Ladona, A. Bosch and M. J. Bleda	3223	Corrigendum: Blood levels of polychlorinated dibenzodioxins, polychlorinated dibenzofurans and polychlorinated biphenyls in the general population of a Spanish Mediterranean city

AUTHOR INDEX

Aalderink G. H.	2175	Balcioğlu I. A.	451, 1993
Agapkina G. I.	1125	Baldrian P.	435
Agathos S. N.	1575	Balestrini R.	1095
Aherne J.	985	Ballarin-Denti A.	871, 1049, 1083
Ahlf W.	1291	Ballschmiter K.	2891
Ahmed M. T.	1391	Balta-Brouma K.	2855
Akkapeddi A.	807	Baratozzi L.	1037
Akpan V.	1703	Barbieri L.	1759
Al-Jahmani Y. Y.	3093	Bauer O. H.	2085, 2103
Al Rasbi S. A.	1391	Baur M.	865
Albrecht P.	2211	Bea-Ven Chang	537, 2721
Alonso R.	685	Becher D.	2321
Altorfer H.	2747	Beinrohr E.	1305
Alvarez Piñeiro M. E.	597	Benfenati E.	2007
Ambrosi P.	1043, 1055	Bennici A.	715
Andersson B.	1841	Benson W. H.	3167
Andersson J. T.	2569	Béres Cs.	925, 931
Andersson K.	1841	Bergek S.	2705
Andersson P.	1429	Bertolini F.	1043
Andersson R.	315	Bertrand J.-C.	553
Andreae H.	1007	Bester K.	1973
Ankley G. T.	3061	Bettarini I.	771
Anselmi N.	889	Beutel L.	1811
Antonelli F.	841	Biagianti-Risbourg S.	1911
Anttonen S.	663	Bianchi M.	1615
Arah J.	395	Bianco Prevot A.	1523
Aranda R.	1811	Bidleman T. F.	345
Arduini I.	733, 739	Bieniek D.	2523
Askar A. A.	1391	Bierman Jr V. J.	3149
Attar A.	2535	Bipp H.-P.	2523
Augustin S.	965, 971	Bir L.	1485
		Biselli S.	1973
Backlund P.	1947	Bláha L.	1345
Bai Naibin	1475	Blanck K.	1161
Bailey M.	2201	Bleda M. J.	419
Balaganskaya E. D.	721	Bleuler P.	995

- | | | | |
|----------------|---------------------|------------------------------|----------------|
| Blok J. | 2291 | Carlson-Lynch H. | 1167 |
| Blum H. | 777 | Carril González-Barros S. T. | 597 |
| Bo-Chin Chiang | 1553 | Casalini C. | 1703 |
| Boatman R. J. | 1585 | Castelli D. | 2007 |
| Bobinger S. | 2569 | Cenni E. | 1037, 1079 |
| Bonavita P. | 1055 | Chaiyaraksa C. | 1565 |
| Bonner M. | 315 | Chandra G. | 2401 |
| Bontinck W. | 99 | Chang M.-B. | 1959 |
| Bosch A. | 419 | Charoensilp N. | 395 |
| Bottacci A. | 919 | Chemini C. | 1055 |
| Bottoni P. | 1759 | Chen C.-M. | 189 |
| Bouchard D. C. | 1883 | Chen S.-J. | 2031 |
| Boudot J.-P. | 1275 | Chen-Wei Chiang | 537 |
| Boulaamail A. | 2809 | Chen Yijun | 329 |
| Boulekbache H. | 1911 | Cheung S. T. C. | 2461 |
| Boyle G. M. | 985 | Chien-Min Chen | 1201 |
| Bragaloni M. | 889 | Chih-Jong Chang | 2391 |
| Brambilla E. | 1083 | Chin-Hung Wu | 2345 |
| Brannon J. M. | 1453 | Chin-Hwa Hu | 2367 |
| Bredemeier M. | 1161 | Chow J. | 1001 |
| Brekken J. F. | 2699 | Chung Han Lee | 2483 |
| Brenner K. | 1 | Chung-Jen Su | 2721 |
| Brevik E. M. | 213 | Chung Y.-T. | 1959 |
| Brezonik P. L. | 2699 | Cocke D. L. | 547 |
| Briede A. | 3043 | Cocucci S. M. | 1049 |
| Brinker L. | 2437 | Codling E. E. | 1463 |
| Brock T. C. M. | 2175 | Coleman M. D. | 807 |
| Broto-Puig F. | 61 | Comellas L. | 61 |
| Brotsack R. | 2855 | Comfort S. D. | 1849 |
| Brown D. | 1367 | Connell D. W. | 2019 |
| Brown R. H. A. | 1799 | Connell P. A. | 2019 |
| Brüggemann R. | 441 | Cooper C. M. | 3167 |
| Bruschi P. | 715 | Cooper K. | 315 |
| Bucher J. B. | 777 | Cooper K. R. | 189, 409, 2705 |
| Buendia L. V. | 395 | Corin N. | 1947 |
| Buhler D. R. | 203 | Corton T. M. | 395 |
| Burgess R. M. | 2549 | Cox J. S. | 3061 |
| Bury D. | 271 | Cozzi A. | 1037 |
| Bush B. | 1653, 1637 | Croudace C. P. | 1367 |
| Bussotti F. | 841, 913, 919, 1079 | Crum S. J. H. | 2175 |
| Butcher J. B. | 3149 | Csiha I. | 935 |
| Buyle B. | 99 | Cummins T. | 985 |
| Bytnerowicz A. | 697, 1001 | | |
| | | da Silva E. M. | 2375 |
| Caixach J. | 2359, 2941 | Dai Iemei | 329 |
| Cano M. L. | 1585 | Damborský J. | 1345 |
| Cao Mi | 329 | Darwish N. A. | 3093 |
| Cape J. N. | 895, 1799 | Davoli E. | 2007 |

- | | | | |
|------------------|------------------|--------------------------|------------------|
| De Angelis P. | 763 | Federle T. W. | 2291 |
| de Moraes R. M. | 989 | Feicht E. A. | 2903 |
| de Wolf W. | 1319, 1713 | Feicht E. | 497 |
| Deflandre B. | 553 | Feigelson L. | 1485 |
| Degen B. | 819 | Feijen J. | 461 |
| Del Carlo G. | 1759 | Feijtel T. | 1319 |
| Della Torre G. | 651 | Feijtel T. C. J. | 2291 |
| Dell'Era R. | 1083 | Feil H. | 461 |
| Delpuech J.-M. | 1775 | Fenn M. | 1001 |
| Deng Nansheng | 3101 | Fenyvesi A. | 925, 931 |
| Deng Y. | 181 | Fernandes A. | 1 |
| Derome J. | 1101, 1131, 1143 | Fernández M. A. | 2941 |
| Derome K. | 1143 | Fernández-Sanjurjo M. J. | 1107 |
| Desrosiers G. | 553 | Fernández-Vega V. | 1107 |
| Deutschmann G. | 1149 | Ferranti F. | 651 |
| Di Girolamo F. | 1049 | Ferretti M. | 1025, 1037, 1079 |
| Diamadopoulos E. | 2855 | Fiedler H. | 315, 2705 |
| Diamond M. L. | 2607 | Field J. A. | 1445 |
| Dickson R. E. | 807 | Figoli A. | 651 |
| Dierickx P. J. | 1263 | Filiptchouk A. N. | 1119 |
| Dolara P. | 1703 | Finizio A. | 345 |
| Domingo J. L. | 2581 | Finley B. L. | 1167 |
| Domingos M. | 989 | Fischer K. | 2523 |
| Donato E. | 801 | Fischer R. G. | 2891 |
| Dorn P. B. | 2149 | Fisher S. W. | 3181 |
| Dott W. | 1513 | Forti S. | 1759 |
| Dougherty R. C. | 167 | Fouillet P. | 1775 |
| Durán N. | 2119 | Franssen M. C. R. | 1445 |
| Dyi-Hwa Tseng | 1187 | Franzén R. | 2803 |
| | | Freire Jr, M. | 2119 |
| Ebeling E. | 263 | Friesel P. | 2085, 2103 |
| Ebeling M. | 3071 | Fu-Sheng Wei | 73 |
| Eisenträger A. | 1513 | Fujita S. | 3211 |
| El Fantroussi S. | 1575 | Funari E. | 1759 |
| El-Demerdash A. | 1543 | Fung A. K. M. | 2461 |
| Eljarrat E. | 2359, 2941 | Furlanello C. | 1055 |
| Emons H. | 523 | Fytianos K. | 2067, 2741 |
| Engel C. | 789 | | |
| Erbe T. | 2437 | Gabriel J. | 435 |
| Esch A. | 645 | Gadea E. | 419 |
| Eschenbach A. | 2211 | Gagne J.-P. | 553 |
| Esplugas S. | 427 | Gagnon Z. | 807 |
| Evans R. | 1669 | Galli L. | 1095 |
| | | Gamberini R. | 1523 |
| Fargašová A. | 1305 | Gang Yu | 2673 |
| Farmer J. G. | 1799 | García-Rodeja E. | 1107, 1137 |
| Farrell E. P. | 985 | Gareau E. | 1775 |
| Fattore E. | 2007 | Gartiser S. | 2437 |

- | | | | |
|----------------------|--------------------|-----------------------|--------------------|
| Garvens H. J. | 1725 | Han-Fa Zou | 73 |
| Garvey E. A. | 3149 | Hanazato T. | 1909 |
| Gatermann R. | 1973, 2535 | Hardman R. | 1 |
| Gawlik B. M. | 2903 | Harris L. R. | 2149 |
| Gaynor J. D. | 3199 | Harrison I. | 1211 |
| Geddes J. D. | 2057 | Hasegawa S. | 2305 |
| Gee I. L. | 2497 | Hauschild M. | 3071 |
| George E. | 1043 | Hayes C. | 1453 |
| Getoff N. | 1993 | Hebert V. R. | 2057 |
| Ghetti P. F. | 2949 | Heinze L. | 1725 |
| Gilbert F. | 553 | Henderson M. C. | 203 |
| Gimeno B. S. | 685 | Hendrey G. R. | 777 |
| Giot R. | 1575 | Henkelmann B. | 2775, 2855 |
| Giuliano G. | 1759 | Hernández L. M. | 2941 |
| Godbold D. L. | 733, 739, 757, 859 | Herve S. | 1415 |
| Godzik S. | 901 | Heumann K. G. | 1935 |
| Gomes de Moraes S. | 2119 | Higgo J. J. W. | 1211 |
| Gonzalez C. A. | 419 | Hilmi A. | 3113, 3137 |
| González Ma. J. | 2941 | Hines M. E. | 1669 |
| Gonzalez-Muñoz M. T. | 475 | Hing Man Chan | 2135 |
| Gordon D. C. | 853 | Hirai K. | 3211 |
| Gossiaux D. C. | 3181 | Hisanaga T. | 1985 |
| Götz R. | 2085, 2103 | Hogan G. D. | 633 |
| Grady Jr C. P. L. | 2291 | Holopainen T. | 679, 795 |
| Gramss G. | 1923 | Holten Lützhøft H. C. | 357 |
| Gravano E. | 919 | Hong C. S. | 1637 |
| Greim H. | 271 | Hong C.-S. | 1653 |
| Grifoni D. | 841 | Hong Nong Chou | 1201 |
| Grill D. | 709, 1019 | Hong Tan | 2191 |
| Grøn C. | 1689 | Hope B. | 1247 |
| Grossoni P. | 841, 913, 919 | Hoshi H. | 3211 |
| Groszko W. | 3083 | Hovmand M. F. | 669 |
| Guan S. | 167 | Howell F. | 315 |
| Guerold F. | 1275 | Hu J.-C. | 2031 |
| Guhl W. | 99, 143 | Hua-Mei Huang | 2367 |
| Guidi L. | 657 | Huan-Hung Tsai | 2763 |
| Günther Th. | 1923 | Hug C. | 995 |
| Gyldenkerne S. | 2251 | Hühnerfuss H. | 1973, 2535 |
| | | Hui-Jung Huang | 2345 |
| Hagenmaier H. | 2635 | Huici A. | 419 |
| Hahn M. E. | 2921 | Hummelsehøj P. | 669 |
| Hahn K. | 2775 | Hundt K. | 2321 |
| Halhouli K. A. | 3093 | Huntley S. L. | 1167 |
| Hall A. | 2283 | Hustert K. | 497 |
| Halling-Sørensen B. | 357 | Hutchinson T. H. | 99, 115, 129, 143 |
| Halonen I. | 1493 | Huttunen S. | 727, 829, 847, 979 |
| Hammer E. | 2321 | Huuskonen S. E. | 2921 |
| Han S. K. | 3033 | Hyötyläinen J. | 297, 577 |

- | | | | |
|-----------------|-----------|-------------------------|---|
| Ibarz A. | 427 | Kameyama K. | 2337 |
| Iida A. | 2305 | Kamiya M. | 2337 |
| Inclán R. | 685 | Kanungo P. | 339 |
| İnel Y. | 2969 | Karcher W. | 2903 |
| Ingemarsson Å. | 2879 | Kärenlampi L. | 663, 675, 679 |
| Ingerslev F. | 357 | Karidio I. | 231 |
| Innes J. L. | 995, 1025 | Karjalainen T. | 1155 |
| Ipsen A. | 825 | Karl H. | 2819 |
| Isebrands J. G. | 807 | Karlsson P. E. | 691 |
| Isensee A. R. | 13 | Karnosky D. F. | 807 |
| Itoh K. | 483, 2043 | Kasten B. | 825 |
| Iwata H. | 3211 | Kaus A. | 961 |
| | | Kempers A. J. | 2661 |
| Jae-Ho Yang | 3015 | Kettner C. | 733 |
| Jager J. | 2581 | Kettrup A. | 497, 1615, 2523, 2535, 2775, 2855, 2903, 2977 |
| Janßen E. | 1291 | | |
| Javellana A. M. | 395 | Khan S. U. | 589 |
| Jensen N. O. | 669 | Khare P. | 2993 |
| Jentschke G. | 757 | Kieliszewska-Rokicka B. | 751 |
| Jia-Lin Wang | 2391 | Killham K. | 2683 |
| Jia-Ming Lin | 617 | Kim H. S. | 167 |
| Jimenez M. S. | 1019 | Kim J.-S. | 483 |
| Jin-Jia Fan | 1201 | Kim Y. | 409 |
| Jingwen Chen | 2833 | Kinjo T. | 3211 |
| Jinlin He | 2191 | Kinnunen H. | 829, 847 |
| Jiping Zhu | 2135 | Kirsche B. | 1923 |
| Jiunn-Fwu Lee | 1187 | Kittilä M. | 663 |
| Johansen C. | 1689 | Klasmeier J. | 1627 |
| Johnson D. | 1001 | Kļaviņa I. | 3043 |
| Johnson G. W. | 1167 | Kļaviņš M. | 3043 |
| Johnson P. A. | 1367 | Klecka G. M. | 2149 |
| Jones D. | 1001 | Klem D. | 79 |
| Jones J. | 1543 | Klimisch H.-J. | 271 |
| Jones K. C. | 2447 | Klimm C. | 2855 |
| Jones S. H. | 1669 | Klimo E. | 1113 |
| Jørgensen S. E. | 357 | Kloepper-Sams P. J. | 99, 129 |
| Judd M. C. | 2311 | Klumpp A. | 989 |
| Juei Shen Wang | 1201 | Klumpp G. | 989 |
| Juei-Yun Chang | 617 | Knight S. S. | 3167 |
| Jyh-Cherng Chen | 1553 | Knuutinen J. | 297, 577 |
| | | Kögel-Knabner I. | 79 |
| Kacew S. | 589 | Kogevinas M. | 419 |
| Kähkönen M. A. | 1381 | Kohl S. D. | 251 |
| Kalajzic T. | 1615 | Komoža D. | 441 |
| Kallies K. W. | 3167 | Körner C. | 771 |
| Kämäräinen N. | 2475 | Kosian P. A. | 3061 |
| Kamel A. | 1543 | Koskinen W. C. | 1825 |
| Kamens R. M. | 2401 | Kowalska M. | 547 |

- | | | | |
|---------------------|----------|--------------------|------------------|
| Kreibich H. | 2447 | Leivouri M. | 43, 503, 2415 |
| Kreimes K. | 441 | Lenoir D. | 2775 |
| Krinfeld B. | 2933 | Leppänen H. | 2621 |
| Kroon K. J. | 1787 | Leski T. | 751 |
| Kruus P. | 1811 | Leung K. | 2019 |
| Krywult M. | 697 | Levanon D. | 2933 |
| Kudrjavitseva O. V. | 721 | Li M. C. | 2075 |
| Kukkola E. | 727 | Li Z. M. | 1849 |
| Kukkola M. | 1155 | Li Zhong | 329 |
| Kulhavý J. | 1113 | Liansheng Wang | 2833 |
| Kumar G. | 2043 | Lichtensteiger W. | 2747 |
| Kumar N. | 2993 | Lieder P. H. | 1713 |
| Kümmerer K. | 2437 | Liess M. | 3071 |
| Kuo-Hua Wang | 2763 | Lin K. S. | 2075 |
| Kurczyńska E. U. | 751 | Lin T.-C. | 2031 |
| Kurz C. | 783 | Lindgren M. | 1073 |
| Kussak A. | 1841 | Lindqvist O. | 2191 |
| Kuusinen M. | 1073 | Lindroos A.-J. | 1101, 1131, 1143 |
| | | Lindström-Seppä P. | 2921 |
| La Scala S. | 907 | Lindvogt T. | 1513 |
| Laakso K. | 829, 847 | Llobet J. M. | 2581 |
| Labaj A. B. | 3199 | Lo J. G. | 1893 |
| Ladona M. | 419 | Lodovici M. | 1703 |
| Lage Yusty M. A. | 597 | Loewen M. D. | 3119 |
| Lahtiperä M. | 2475 | Loppi S. | 1079 |
| Lain-Chuen Juang | 1187 | Lorenzini G. | 651, 657, 703 |
| Lakatos T. | 935 | Łukasik W. | 901 |
| Lakhlifi T. | 2809 | Luo Fan | 3101 |
| Lam M. H. W. | 2461 | Luong J. H. T. | 3113, 3137 |
| Lam P. S. K. | 2019 | Lupattelli M. | 651 |
| Lamersdorf N. P. | 1161 | Luthe C. E. | 225, 231 |
| Lammi R. | 2475 | | |
| Lamppu J. | 979 | Ma J. | 3033 |
| Landolt W. | 995 | Macías F. | 1137 |
| Landrum P. F. | 3181 | Mackay D. | 2507 |
| Länge R. | 99, 115 | MacTavish D. C. | 3199 |
| Lange W. | 1973 | Maes A. | 2283 |
| Langeland K. | 1 | Magalotti M. | 913 |
| Lantin R. S. | 395 | Maharaj Kumari K. | 2993 |
| Lanzky P. F. | 357 | Mahro B. | 2211 |
| Larfaoui E. M. | 2809 | Makarim A. K. | 395 |
| Larson R. J. | 2291 | Mäkipää R. | 1155 |
| Latimer H. K. | 2401 | Malkavaara P. | 297, 577 |
| Lauchert U. | 865 | Mandal T. K. | 435 |
| Law N. L. | 2607 | Manes F. | 801 |
| Leader R. U. | 1211 | Mangas E. | 61 |
| Lee W.-J. | 2031 | Maňková B. | 949 |
| Lehmann I. | 2819 | Manninen P. K. G. | 1381 |

- | | | | |
|-----------------|---------------|------------------|---------------|
| Manninen S. | 847 | Morita M. | 2803 |
| Mansilla H. | 2119 | Moriwaki H. | 2491 |
| Mansuino S. | 913 | Mostafa G. A. | 1391 |
| Marinelli A. | 1759 | Mouratidou Th. | 2067 |
| Mark U. | 99, 155 | Moza P. N. | 497 |
| Marklund S. | 1429 | Muir D. C. G. | 3119 |
| Marschner P. | 757 | Müller L. | 2007, 2581 |
| Marshall A. G. | 167 | Müller M. | 709 |
| Martens D. | 2855 | Muller S. | 1275 |
| Martín A. | 943 | Müller T. S. | 2043 |
| Marttinen S. | 2621 | Munk R. | 99 |
| Masaphy S. | 2933 | Muntau H. | 1615, 2903 |
| Mason C. F. | 1969 | Murabayashi M. | 483, 2043 |
| Mathew R. | 589 | Muszkat K. A. | 1485 |
| Mattson V. R. | 3061 | Muszkat L. | 1485 |
| McAvoy D. C. | 2291 | Mylavarapu R. S. | 13 |
| McFadzean R. | 2683 | | |
| McLachlan S. | 1627 | Nakayasu C. | 2305 |
| McNamee C. | 1867 | Nali C. | 651, 657, 703 |
| Mendosa J. | 2057 | Nanko-Drees J. | 3071 |
| Mengel K. | 645 | Naveau H. | 1575 |
| Merculova L. N. | 1125 | Næs K. | 561 |
| Merino A. | 1137 | Němec M. | 1345 |
| Mersie W. | 1867 | Nerud F. | 435 |
| Metcalfe T. | 2201 | Neue H. U. | 395 |
| Metcalfe C. | 2201 | Neumann C. M. | 203 |
| Metsärinne S. | 675 | Neuvonen S. | 639 |
| Mi H.-H. | 2031 | Nguyen A.-L. | 3113, 3137 |
| Michaelis W. | 2211 | Nieminen T. M. | 745 |
| Michalke B. | 2855 | Niessen H. | 99 |
| Miglietta F. | 771 | Nihlgård B. | 1119 |
| Mikkelsen T. N. | 669 | Nilsson C.-A. | 1841 |
| Mikkola K. | 1073 | Nilsson M. | 2879 |
| Millán M. M. | 1089 | Nilsson U. | 2879 |
| Miller B. D. | 2867 | Niska K. | 1101 |
| Miller G. C. | 2057 | Nitschke L. | 35 |
| Miller P. | 1001 | Noda T. | 2491 |
| Minamoto N. | 3211 | Noll H. P. | 2977 |
| Minerbi S. | 1043, 1055 | Nors Nielsen S. | 357 |
| Ming-Yen Wey | 1553 | | |
| Mogensen B. B. | 2251 | Öberg G. | 1689 |
| Möller M. | 1513 | Oeben-Negele M. | 271 |
| Molnár T. | 935 | Oetjen K. | 2819 |
| Moo Been Chang | 2483 | Oikari A. | 2621 |
| Moore R. M. | 3083 | Okamoto N. | 2305 |
| Morales D. | 1019 | Ökte A. N. | 2969 |
| Moreno A. J. M. | 2375 | Oleksyn J. | 813 |
| Mori B. | 715, 841, 913 | Olsson J. O. | 2879 |

- | | | | |
|-------------------------|--------------------|-----------------------|---------------|
| Omar N. B. | 475 | Pramauro E. | 1523 |
| Onnis A. | 733, 739 | Price R. W. | 2311 |
| Ossipov V. | 639 | Price C. B. | 1453 |
| Ossipova S. | 639 | Prus-Głowacki W. | 813 |
| Otson R. | 1811 | Puccinelli P. | 889 |
| Oug E. | 561 | Pudenz S. | 441 |
| Oxynos K. | 2855 | Pujadas M. | 685 |
| Ozretich R. J. | 603 | Pussinen A. | 1155 |
| O'Block S. T. | 2149 | | |
| | | Quist M. E. | 627 |
| Pääkkönen E. | 675, 679 | | |
| Paasivirta J. | 1415, 2475 | Raben G. | 1007 |
| Padgett P. | 697 | Raber B. | 79 |
| Palmer G. | 2683 | Rabotti G. | 871 |
| Panades R. | 427 | Raddi P. | 907 |
| Panicucci A. | 703 | Rajaramamohan Rao V. | 339 |
| Paoletti E. | 801, 835, 907, 937 | Ramakrishnan B. | 339 |
| Papamichali A. | 2741 | Rantalainen A.-L. | 1415 |
| Parele E. | 3043 | Rappe C. | 1, 315, 2705 |
| Parker C. A. | 2447 | Raschi A. | 771, 925, 935 |
| Parkpian P. | 1565 | Raschke U. | 1745 |
| Parlar H. | 3119 | Rasmussen A. G. | 2251 |
| Pascoe D. | 1405 | Rautio P. | 979 |
| Pashley V. | 2283 | Ray S. | 2201 |
| Paterson G. | 2201 | Rehmann K. | 2977 |
| Paton G. I. | 2683 | Reich P. B. | 813 |
| Paustenbach D. J. | 1167 | Reutergardh L. B. | 1565 |
| Pavoni B. | 2949 | Reyes J. | 2119 |
| Pechter P. | 807 | Riba M. | 427 |
| Pedersen J. R. | 2879 | Rice J. A. | 251 |
| Pedersen-Bjergaard S. | 213 | Richardson B. J. | 2019 |
| Peijnenburg W. J. G. M. | 2833 | Richnow H. H. | 2211 |
| Pelegri R. | 2119 | Ridder H.-W. | 925, 935 |
| Penchuk J. | 1811 | Riding R. T. | 853 |
| Peng J. | 2731 | Riechers G. | 697 |
| Peñalver J. M. A. | 475 | Riemenschneider D. E. | 807 |
| Peralta-Zamora P. | 2119 | Rimkus G. | 2535 |
| Percy K. | 697 | Rivera J. | 2359, 2941 |
| Percy K. E. | 853, 895 | Ro-Poulsen H. | 669 |
| Peters J. | 1019 | Roch K. | 2085, 2103 |
| Peura R. | 847 | Rochette E. A. | 1825 |
| Phipps G. L. | 3061 | Rodinov V. | 3043 |
| Pihlaja K. | 639 | Röfler J. | 935 |
| Pocceschi N. | 651 | Rönnpagel K. | 1291 |
| Podila G. K. | 807 | Rudawska M. | 751 |
| Poikolainen J. | 1073 | Ruokojärvi P. | 1493 |
| Pongratz R. | 1935 | Ruuskanen J. | 1493 |
| Poth M. | 1001 | Ryba S. A. | 2549 |

- | | | | |
|----------------------------|---------------|--------------------|-------------------|
| Saçan M. T. | 451 | Shaw S. D. | 1637 |
| Sadeghi A. M. | 13 | Shaw-Ying Yuan | 537, 2721 |
| Saleh M. A. | 1543 | Shawky S. | 523 |
| Salizzato M. | 2949 | Shcheglov A. I. | 1125 |
| Salvadori C. | 1043, 1055 | Shea P. J. | 1849 |
| Samecka-Cymerman A. | 2661 | Shearing J. M. | 1367 |
| Sandra P. | 1 | Sheedy B. R. | 3061 |
| Sangchakr B. | 1985 | Sheng Y. | 807 |
| Santamaría J. M. | 943 | Shiraki K. | 3211 |
| Santarelli S. | 919 | Shiu-Mei Liu | 2345 |
| Santini C. | 1759 | Shu-Li Zhao | 73 |
| Sanz Ma. J. | 1089 | Shu-Mu Hsieh | 1553 |
| Satsangi G. S. | 2993 | Siegwolf R. T. W. | 777 |
| Saupe A. | 1725 | Siltala J. | 297 |
| Saurer M. | 777 | Simal Lozano J. | 597 |
| Savage J. E. | 995 | Simon A. | 955 |
| Savini P. | 1037 | Sinclair A. | 2683 |
| Scarascia-Mugnozza G. E. | 763 | Singh A. | 3055 |
| Scatolini S. | 1247 | Singh D. K. | 3055 |
| Schall P. | 965, 971 | Singh K. | 3055 |
| Scharenberg W. | 263 | Sinkkonen S. | 2475 |
| Schauer F. | 2321 | Skärby L. | 691 |
| Schiff S. | 715 | Skelly J. M. | 995 |
| Schilling S. | 1001 | Slayton T. M. | 3003 |
| Schlatter Ch. | 21 | Snyder K. R. | 995 |
| Schlumpf M. | 2747 | Soares A. M. V. M. | 2375 |
| Schmadel-Hageböiling H. E. | 789 | Soja G. | 709 |
| Schmid P. | 21 | Solbé J. | 99, 115, 129, 155 |
| Schmieden U. | 783, 965, 971 | Soldatini G. F. | 657 |
| Schmitt V. | 789, 877, 883 | Sollars C. J. | 2497 |
| Schmitz R. P. H. | 1513 | Sommar J. | 2191 |
| Scholz F. | 819, 825 | Sørensen P. B. | 2251 |
| Scholz N. | 99, 115, 143 | Šrámek V. | 1067 |
| Schramel P. | 2855 | Srivastava S. S. | 2993 |
| Schramm K.-W. | 2775, 2855 | Staples C. A. | 1585, 2149 |
| Schrenk D. | 2635 | Staszewski T. | 901, 1013 |
| Schuhmacher M. | 2581 | Steevens J. A. | 3167 |
| Schuler F. | 21 | Stefani A. | 733, 739 |
| Schulz D. W. | 603 | Stein C. | 79 |
| Schulz R. | 3071 | Steinberg C. E. W. | 2977 |
| Schüssler W. | 35 | Stern G. A. | 3119 |
| Scott S. | 2507 | Stjernquist I. | 1119 |
| Seiber J. N. | 1233 | Stora G. | 553 |
| Seifert R. | 2211 | Stottmeister U. | 1745 |
| Selldén G. | 691 | Stoutjesdijk J. H. | 461 |
| Semb S. I. | 213 | Strakhov V. V. | 1119 |
| Sergeant Y. | 1 | Strobel P. | 783 |
| Seybold C. | 1867 | Stuthridge T. R. | 2311 |

- | | | | |
|-----------------------|-----------|-----------------------|------------|
| Sun Hao | 329 | Vahala J. | 679 |
| Sun Z. | 2043 | Valberg P. A. | 3003 |
| Sünderhauf W. | 2581 | Vallius H. | 503, 2415 |
| Suomela J. | 639 | Van Den Beuken R. | 985 |
| Suter-Eichenberger R. | 2747 | Van der Lee J. | 2283 |
| Sutinen S. | 691 | van der Werf H. M. G. | 2225 |
| Sweetman A. J. | 2447 | van der Zee M. | 461 |
| Symossek F. | 1007 | van Elteren J. T. | 1787 |
| Szdzuj J. | 901, 1013 | Vanderpoorten A. | 1275 |
| Szeto S. Y. | 345 | Vansal S. S. | 3167 |
| | | Vaquero M. T. | 61 |
| Tagliaferri A. | 1095 | Verhagen F. J. M. | 1445 |
| Tagliaferro F. | 1061 | Vernet G. | 1911 |
| Takenaka S. | 2277 | Vertui F. | 1061 |
| Tanabe K. | 2803 | Vidal A. | 2593 |
| Tanabe S. | 3211 | Vincenti M. | 1523 |
| Tanaka K. | 1985 | Vinceti B. | 937 |
| Tanaka M. | 2491 | Vitale M. | 801 |
| Tani C. | 841, 919 | Voigt K.-D. | 1923 |
| Tao X. C. | 3033 | Volpi Ghirardini A. | 2949 |
| Tarhanen J. | 1493 | Voudrias E. | 2067, 2741 |
| Tarjan D. P. | 777 | | |
| Tartari G. | 1095 | Wagenaar H. | 1 |
| Tatsukawa R. | 3211 | Wagner M. | 2321 |
| Tausz M. | 709, 1019 | Wait A. D. | 3003 |
| Temple P. | 1001 | Wallin G. | 691 |
| Terés J. | 685 | Wan A. | 2731 |
| Terrier O. | 1775 | Wanfang L. | 395 |
| Terrón M. C. | 1445 | Wang Guilian | 1475 |
| Theobald N. | 1973 | Wang H. P. | 2075 |
| Thiebaut G. | 1275 | Wang L. S. | 3033 |
| Thomas G. O. | 2447 | Wang Liansheng | 329 |
| Thompson T. S. | 2867 | Wang Qin | 329 |
| Tiernan T. | 1 | Wang Xiaorong | 329 |
| Tierney D. | 1867 | Wang Y. | 1653 |
| Tikhomirov F. A. | 1125 | Wang Z. | 395 |
| Titus E. | 1247 | Wanpeng Zhu | 2673 |
| Todd Hsu | 2367 | Warwick P. | 2283 |
| Tognietti R. | 935 | Wassmann R. | 395 |
| Tollabi M. | 2809 | Watson J. | 1001 |
| Tsujimoto Y. | 2491 | Watts M. M. | 1405 |
| Tuppurainen K. | 1493 | Weber J. H. | 1669 |
| | | Weber R. | 2635 |
| Uloth V. | 231 | Webster E. | 2507 |
| Utriainen J. | 795 | Wehrmeier A. | 2775 |
| Uziębło A. K. | 901, 1013 | Wehrung P. | 2211 |
| | | Weltje L. | 2643 |
| Vaccari F. P. | 771 | Werner G. | 1745 |

Author Index

Westmore J. B.	3119	Xu M.	167
Wiklund T.	1947	Xu Y.-J.	1161
Wild A.	783, 789, 865, 877, 883, 955, 961	Yang K. L.	1893
Wilde H.	1745	Yeboah F.	2135
Wilksch W.	883	Yoshitomi T.	2305
Williams G. M.	1211	Yun-Huin Lin	2391
Williams N. J.	1367	Yung-Hsu Hsieh	2763
Winter S.	757		
Wogram J.	3071	Zadrazil F.	435
Wohlfahrt S.	877	Zakarya D.	2809
Wolf U.	937	Zappa C.	1703
Wonisch A.	709	Zavatti A.	1759
Woroniecka U. D.	1787	Zehavi D.	1233
Wright R. J.	1463	Zhang A. Q.	3033
Wright S. F.	1463	Zhihua Yang	2673
Wu Feng	3101	Zhonghe Li	2673
Wu R. S. S.	2019	Ziegenhagen B.	825
Wu T.-L.	2031	Ziegler-Skylakakis K.	271
Wujcik C. E.	1233	Zifan Xiao	2191
Wunsch P.	2523	Zimmer C.	2225
		Zimmermann R.	2775
Xiao-Bai Xu	73	Zipoli G.	841
Xiao J.	1637	Zuo Y.	181
Xiao Mei	3101		

